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The connection between the level of career indecision and the perceived self-efficacy on the career decision-making among teenagers

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Abstract

Career Indecision is the key issue that specialists in career advice are interested to evaluate. The present study, with a correlational design, aims to investigate the connection between the level of career indecision and the perceived self-efficacy on making career decisions among teenagers at the end of upper secondary education (N = 160). Based on the results, it was established that there is an insignificant negative correlation between gender and career indecision, however, between self-efficacy on making career decisions and gender of participants there is a significant positive correlation.

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Background:

Teenagers in the eleventh and twelfth grade are defined as the most suitable for investigating decision-making career choices (Germeijs, Verschueren & Soenens, 2006). Harrington & Harrigan (2006) concluded that in the eleventh and twelfth grade, teenagers' preferences relative to profession seem to change and become more realistic, compared to students in the eight to tenth grade which seem to remain constant.

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Many authors believe that indecision is the inability to make decisions in different contexts and situations (Frost & Shows, 1993; Gaffner & Hazler, 2002; Patalano & Wengrovitz, 2006 Saka & Gati, 2007). People with a high degree of indecisiveness consume more time to choose between different alternatives (Frost & Shows, 1993), use very little effective decision-making strategies (Ferrari & Dovidio, 2000, 2001), submit a high cognitive effort into making decisions (Ferrari & Dovidio, 2001), feel threatened by ambiguous situations (Rassin & Muris, 2005) and are more likely to postpone decisions (Rassin & Muris, 2005). Moreover, indecision has been associated with certain individual characteristics such as neuroticism (Jackson, Lawty- Furnham & Jones, 1999), low self-esteem (Burka & Yuen, 1983; Ferrari, 1991), procrastination (Beswick, Rothblum & Mann, 1988; Ferrari, 1992), obsessive-compulsive tendencies (Frost & Shows, 1993 Gayton et. al., 1994) and perfectionism (Frost & Shows, 1993 Gayton et. al., 1994). Furthermore, difficulties in career choice were associated with personality and emotional intelligence (Di Fabio & Palazzeschi, 2009).

Self-efficacy in making career decisions represents the confidence of the individuals in which they can engage in activities associated with choosing a route or vocational education and career commitment (Taylor & Betz, 1983).

Since the emergence of the concept of self-efficacy in career decision making literature, studies have shown its importance in career development (Bandura, 1997, 2006). For example, studies have found surprising positive correlation between self-efficacy in making career decisions and: vocational identity (Gushue, Scanlan, Pantzer & Clarke, 2006), career exploration (Blustein, 1989), occupational self-efficacy (Taylor & POPM, 1990), career decisions attitudes (Luzzo, 1993), self-esteem (Robbins, 1985) and career preferences maturation (Gianakos, 2001). Contrarily, some studies have shown negative correlation between self-efficacy in making career decisions about career and: career indecision (Lopez & Ann-Yi, 2006; Taylor & Betz, 1983; Taylor & POPM, 1990), isolation from others (Gianakos, 2001) and fear of commitment (Wolfe & Betz, 2004).

Flores et al. (2003) extended their research on career indecision which included various demographic and contextual factors that have a high potential on making career decisions. Bandura (2006) captured the existence of gender differences on the level of professional effectiveness, career choice and personal development.

Other studies, such as those made by Betz & Hackett (1983) and Hackett et al. (1981) support the existence of gender differences regarding self-efficacy in making a choice for a profession, particularly regarding concern on the professional path that has proven to be more dominant in adolescents. In most cases, male teenagers feel more effective working in the fields of science and technology, while female teenagers feel more effective in professions traditionally held by their gender (Bandura, 1997, 2006; Betz & Hackett, 1981). In a study conducted by Marlino & Wilson (2003) it was found that, while male and female adolescents have comparable levels of self-efficacy, there are gender differences in some key areas; more precisely, the girls have a low level in the areas of mathematics, finance, decision-making and problem solving, but have significantly better results in planning and gathering information on the profession they wish to follow, concludes Gianakos his study (2001).

Based on the results conveyed by the literature, the purpose of the present study is to identify whether there are gender differences in career indecision or self-efficacy regarding making career decisions for adolescents in the last year of high-school.

Here introduce the paper, and put a nomenclature if necessary, in a box with the same font size as the rest of the paper. The paragraphs continue from here and are only separated by headings, subheadings, images and formulae. The section headings are arranged by numbers, bold and 10 pt. Here follows further instructions for authors.

Method

Participants

The study was conducted on a sample of 160 participants, students at the National College "Dragos Voda" from Sighetu-Marmatiei, Maramures County, 71 (44.4%) are male teenagers and 89 (55.6%) are female teenagers, aged 16-18 years ($m = 17$, $SD = 0.81$). All participants are students of the school.

Participation in the investigation was voluntary and anonymous. Participation agreements, data confidentiality and other ethical aspects were assured.

Measures

The two variables investigated in the study (career indecision and self-efficacy on career choice decisions) were measured using the following tools for collecting data:

Vd1 - career indecision was measured by "Career decision difficulties questionnaire" CDDQ (Gati, Krausz & Osipow, 1996)

Vd2 - self-efficacy in career decision making was measured using the Scale of self-efficacy in career decision-CDMS-SF short form (Taylor & Betz, 1983)

Career Decision Difficulties Questionnaire CDDQ (Gati, Krausz & Osipow, 1996)

The questionnaire assesses difficulties in career decision in terms of three coordinates: the lack of preparation, lack of information and inconsistent information. The questionnaire includes 34 items grouped into 10 subscales corresponding to the 10 sources of career indecision. Additionally this questionnaire includes three additional items: one item requiring participants to indicate whether or not they took a decision on the future career, one item that seeks the trust of the person in the decision and the last item measures the degree of difficulty appreciated by them on career decision.

The items of the questionnaire are quoted on a Likert scale of 1 to 9.

The current study applied only the subscales "Lack of information" and "Inconsistent information" concerning issues about the lack of information in: decision-making, about himself, about occupations and ways of obtaining information (subscale "Lack of information"), and the subscale "Inconsistent information" refers to the contradictory information, the occurrence of conflicts, both external and the internal.

Gati et al (1996) reported Cronbach α of internal consistency coefficient of .95 for the entire questionnaire, 0.70, .93, .91 for the three categories of difficulties on the Israeli population. On the American population, the same authors have obtained Cronbach α of internal consistency coefficient of .95 for the entire questionnaire and .63 .95, .89 for the three subscales. In general, the internal consistency coefficient is very good within studies proving Cronbach α coefficient above .80 (Gati, Osipow & Krausz, 1996; Osipow & Gati, 1998; Gati, Osipow, Krausz & Saka, 2000; Mau 2001). The coefficients obtained after the test-retest fidelity type verification were .67, .74, .72 for the three major categories of difficulties and .80 for full Israeli sample questionnaire.

Career Decision- Making Self-Efficacy- Short Form Scale; CDMSE-SF (Taylor & Betz, 1983)

This instrument measures the self-confidence of teenagers to take optimal decisions concerning their own career and presents five subscales: self-assessment, obtaining information, setting goals, career planning and problem solving. The questionnaire contains 25 items (eg items: "How much confidence you have in yourself, so that you can plan your goals for the next five years") is quoted on a Likert scale of 1 to 5 where 1 is "total distrust", and 5 "complete trust".

In this research focus was on the subscale "career planning" aimed at the confidence level of teenagers to set goals in the short, medium and long term in terms of educational and professional route.

Taylor & Betz, (1983) indicate the high internal consistency for items, coefficient Cronbach α being .83 for the subscales and .94 for the total score on the 25 items.

Research design

In this study we used a correlational design, thus investigating the relationship between perceived self-efficacy and career indecision between the two sexes (male and female). In this regard we started working with the following hypothesis: The level of career indecision, subsequently self-efficacy on career decisions process varies with gender of subjects.

Procedure

In the first stage all participants were informed about the purpose of the present investigation and about the instruments used to collect the data. To avoid any measuring error that might have been due to the data collection procedure, all participants were given a collective briefing before questionnaire completion. After this stage every participant had individually filled the form in a paper-pencil format.

Results

Table 1: Gender differences on the level of Career Decision

		Report		
gender		CDDQ_ lack_ of information	CDDQ_ inconsistent information	CDDQ_total
male	Mean	9,6739	6,9474	16,2281
	N	46	38	57
	Std. Deviation	2,14014	2,69080	5,76014
female	Mean	9,1774	7,4773	15,2500
	N	62	44	64
	Std. Deviation	2,63970	2,54712	6,19780
Total	Mean	9,3889	7,2317	15,7107
	N	108	82	121
	Std. Deviation	2,44121	2,61193	5,99088

It is noted that, in terms of career indecision, male teenagers in the current study recorded higher average level of career choice difficulties ($M = 16.2$; $SD = 5.76$), also for its subscales, in comparison with female teenagers of the study ($M = 15.2$; $SD = 6.19$).

Table 2. Gender differences regarding self-efficacy on career decisions

		Report	
gender		Self-efficacy_ in_ career_ planning	Self-efficacy_total
Male	Mean	6,6875	15,7500
	N	32	12
	Std. Deviation	3,30627	8,40049
Female	Mean	7,9167	17,5625
	N	48	16
	Std. Deviation	3,16788	7,85679
Total	Mean	7,4250	16,7857
	N	80	28
	Std. Deviation	3,25994	7,99239

For self-efficacy level on making career decisions, girls achieved a higher average level overall and its subscale ($M = 17.5$, $SD = 7.85$) compared to male participants ($M = 15.7$; $SD = 8.4$).

Table 3: Kolmogorov-Smirnov test to check for variable data distribution for career indecision

One-Sample Kolmogorov-Smirnov Test				
		CDDQ_inconsistent _information	CDDQ_lack_of_ information	CDDQ_total
N		82	108	121
Normal Parameters ^{a,b}	Mean	7,2317	9,3889	15,7107
	Std. Deviation	2,61193	2,44121	5,99088
	Absolute	,250	,414	,188
Most Extreme Differences	Positive	,145	,197	,147
	Negative	-,250	-,414	-,188
Kolmogorov-Smirnov Z		2,262	4,299	2,066
Asymp. Sig. (2-tailed)		,000	,000	,000

a. Test distribution is Normal.

b. Calculated from data.

Table 4: Kolmogorov-Smirnov test to check for self-efficacy variable of data distribution on making career decisions

One-Sample Kolmogorov-Smirnov Test

		Autoeficacitate_ planificarea_carierei	Autoeficacitate_ total
N		80	28
Normal Parameters ^{a,b}	Mean	7,4250	16,7857
	Std. Deviation	3,25994	7,99239
	Absolute	,286	,243
Most Extreme Differences	Positive	,215	,152
	Negative	-,286	-,243
Kolmogorov-Smirnov Z		2,554	1,285
Asymp. Sig. (2-tailed)		,000	,073

a. Test distribution is Normal.

b. Calculated from data.

In agreement with K-S test results obtained by calculating the measured variables, it is not statistically significant, respectively career indecision ($z = 2.066$; $p < 0.01$) and self-efficacy on making career decisions ($z = 1.285$; $p < 0.05$), therefore the distribution of these variables did not differ significantly from a normal distribution.

To check if there is a significant correlation between career indecision and gender of participants, respectively if there is a significant correlation between self-efficacy on making career decisions and gender, the Pearson correlation coefficient r was calculated. The results are presented in Table 5 and Table 6.

Table 5: Correlation between career indecision and gender of participants

Correlations

		CDDQ_total	gender
CDDQ_total	Pearson Correlation	1	-,082
	Sig. (2-tailed)		,372
	N	121	121
gender	Pearson Correlation	-,082	1
	Sig. (2-tailed)	,372	
	N	121	160

Table 6: Correlation between self-efficacy on making decisions and gender of participants

Correlations

		Self-efficacy_total	gender
Autoeficacitate_total	Pearson Correlation	1	,114
	Sig. (2-tailed)		,563
	N	28	28
gender	Pearson Correlation	,114	1
	Sig. (2-tailed)	,563	
	N	28	160

According to the results, there is an insignificant negative correlation between gender and career indecision $r(119) = -0.082$, $p < 0.01$, (119 are degrees of freedom, $df = N - 2$ where N is the number of subjects) which means that there is no association between the two measured variables. However, between self-efficacy on making career decisions and gender of participants there is a significant positive correlation $r(26) = 0.114$ (26 are degrees of

freedom, $df = N-2$ where N is the number of subjects), which represents that there is moderate correlation between the two variables.

Discussion

Gender differences were commonly studied in relation to the difficulties of making career decisions, especially with self-efficacy on making career decisions (Slow & Hackett, 1987; Gati, Osipow & Givon, 1995; Patton & Creed, 2001; Gati & Saka, 2001). In this study there are no differences between gender and career indecision [$r(119) = -0.082$; $p < 0.01$], but among self-efficacy on making career decisions and gender there is a moderate divergence [$r(26) = 0.014$; $p < 0.01$].

The same difference vis-a-vis career indecision by gender was reported in a recent research conducted by Bîrle (2010), where there were obtained insignificant differences between male and female participants and self-efficacy in making career decisions and its subscales. However, significant differences were statistically obtained in the subscales for career indecision due to lack of information and the gender of the participants [$t(722) = 2,636$; $p = 0.009$; Cohen $d = .194$].

The data obtained indicates that male individuals included in the study recorded increased average in general difficulties related to career choice or its subscales, in comparison with the female participants at the study, also self-efficacy regarding career decisions making, the girls achieved a higher average level for general self-efficacy and its subscale compared to male participants.

Based on these results we can say that the working hypothesis of this study, we can only, partly confirm, the level of career indecision and self-efficacy on making career decisions for teenagers in their last years of high school, differ according to gender affiliation.

Limitations of the current study

One of the limitations of this study is the sample of participants, teenagers included in the study were students of a single school, therefore the results do not indicate a high degree of accuracy in generalizing the results.

Another limitation of the study is the use of measuring tools not adapted and validated data on the population of Romania, so the psychometric properties remain unchanged. We are considering the persuasion of such a study.

The third limitation could be the lack of integration of exogenous variables (eg. educational level) and endogenous (eg dysfunctional beliefs, personality traits, perfectionism), which could provide an overview of the entire career decision difficulty concerning the study participants.

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